What is claimed:

1. **(Currently amended)** A system for synthesizing a nano-scaled powder material, comprising:

(A) a chamber for receiving nano-scaled clusters generated from a material selected from the group consisting of a metal, a metal compound, and a ceramic;

(B) a twin-wire electrode device in supplying relation to said chamber for supplying nano-scaled clusters therein, said electrode device comprising

(i) two wires made up of said material, with each wire having a leading tip which is continuously or intermittently fed into said chamber in such a fashion that the two leading tips are maintained at a desired separation; and

(ii) means for providing electric currents and a working gas flow for creating ~~an~~ ~~ionized~~ a first plasma arc between the two leading tips for ~~melting and/or~~ vaporizing said material to generate said nano-scaled clusters;

(C) means for injecting a quench gas and/or a reaction gas into a quenching/reaction zone inside said chamber at a point ~~inside said arc or~~ downstream from said arc to facilitate the formation of nano-scaled powder particles; and

(D) means to collect the nano-scaled powder material.

2. **(Currently amended)** The system as defined in claim **1**, further including a second plasma arc zone below said ~~ionized~~ first plasma arc to vaporize any un-vaporized material dripped therefrom.

3. **(Currently amended)** The system as defined in claim **1**, wherein said arc defines a shape having a top portion and a bottom portion and said system further includes ~~including~~ a reservoir disposed at the bottom portion of said arc or a distance below said arc in such a fashion that said reservoir receives any un-vaporized material from the wires and exposes said un-vaporized material to the heat energy of said arc to further vaporize at least a portion of said un-vaporized material.

4. **(Currently amended)** A system for synthesizing a nano-scaled powder material mixture, comprising:

(A) a chamber for receiving nano-scaled clusters generated from two materials of different compositions with each material selected from the group consisting of a metal, a metal compound, and a ceramic;

(B) a twin-wire electrode device in supplying relation to said chamber for providing nano-scaled clusters therein, said electrode device comprising

(i) two wires respectively made up of said two different materials, each wire having a leading tip and each wire being continuously or intermittently fed into said chamber in such a fashion that the two leading tips are maintained at a desired separation; and

(ii) means for providing electric currents and a working gas flow for creating an ionized arc between the two leading tips for ~~melting and/or~~ vaporizing said materials to generate said nano-scaled clusters;

(C) means for injecting a quench gas and/or a reaction gas into a quenching/reaction zone inside said chamber at a point ~~inside said arc or~~ downstream from said arc to produce a nano-scaled powder particle mixture; and

(D) means to collect the nano-scaled powder material mixture.

5. **(Previously presented)** The system as defined in claim **1**, **2**, **3**, or **4** further including wire feed and control means to regulate the feed rates of said two wires.

6. **(Previously presented)** The system as defined in claim **1**, **2**, **3**, or **4** wherein said means for providing electric currents comprises an electric power supply selected from the group consisting of a high-voltage source, a high-current source, a pulsed power source, and combinations thereof.

7. **(Previously presented)** The system as defined in claim **1**, **2**, **3**, or **4** further including means for controlling the rate of flow of the quench gas and/or the reaction gas, thereby enabling change of particle size of the nano-scaled powder material.

8. **(Previously presented)** The system as defined in claim **1**, **2**, **3**, or **4** wherein said reaction gas is selected from the group consisting of nitrogen, phosphorus, arsenic, oxygen, sulfur, selenium, tellurium, fluorine, chlorine, bromine, iodine, a carbon-containing gas, and mixtures thereof.

9. **(Cancelled)**.

10. **(Cancelled)**.

11. **(Previously presented)** The system as defined claim **1**, **2**, **3**, or **4** wherein said means for injecting comprises a concentric gas injection device adjustably positioned along the location of said ionized arc.

12. **(Previously presented)** The system as defined in claim **1**, **2**, **3**, or **4** wherein said quench gas is selected from the group consisting of helium, argon, air, water vapor, carbon monoxide, carbon dioxide, hydrogen and combinations thereof.

13. **(Previously presented)** The system as defined in claim **1**, **2**, **3**, or **4** further including means for providing dissociable inert gas mixable with said working gas, the dissociable inert gas increasing the temperature gradient in said ionized arc.

14. **(Previously presented)** The system as defined in claim **1**, **2**, **3**, or **4** further including means separate from said means for injecting a quench/reaction gas, said separate means for injecting a cooling gas into said nano clusters, thereby minimizing agglomeration of the nano powder material or mixture.

15. **(Previously presented)** The system as defined in claim **1**, **2**, **3**, or **4** wherein said working gas flow direction is approximately vertical.